

Patent claims

5 1. Transmission system for transmission of digital signals,  
present in the form of time-division multiplex channels,  
between an exchange termination (ET) and a line termination  
(LT), **characterized in that** both the exchange termination (ET)  
and the line termination (LT) respectively have a means (IWF)  
for connection to a user interface (UNI) of an ATM network  
(ATMN), in order to convert the time-division multiplex data  
10 into ATM cells, or, respectively, to convert the ATM cells  
into time-division multiplex data, whereby a virtual ATM  
channel is allocated to each time-division multiplex channel.

2. Transmission system according to claim 1, with a switching  
device (PBX) for time-division multiplex digital signals and  
with several exchange terminations (ET), **characterized in that**  
several exchange terminations (ET) of the switching device are  
connected to a single user interface (UNI) of an ATM network  
(ATMN).

3. Transmission system according to claim 2, **characterized in**  
**that** all exchange terminations (ET) of the switching device  
are connected to a single user interface (UNI) of an ATM  
network (ATMN).

4. Transmission system according to one of the preceding  
claims, **characterized in that** the means (IWF) for converting  
time-division multiplex data and ATM cells contains a channel  
multiplexer/demultiplexer (C-M/DM), in order to distribute the  
30 digital signals of the individual time-division multiplex  
channels to the respectively allocated ATM cells, or,

respectively, to recuperate them from the ATM cells and distribute them into the allocated time-division multiplex channels, an ATM converter (ATMC) for packing items of digital information received from the channel

5 multiplexer/demultiplexer (C-M/DM) into ATM cells or, respectively, for unpacking ATM cells and emitting the digital information contained therein to the channel

multiplexer/demultiplexer (C-M/DM), and for insertion of ATM cells into a cell stream of the ATM network (ATMN) or,

10 respectively, for removal of ATM cells from this cell stream, and contains an interface (IF-STM1) in order to pass an item of synchronization information of the time-division multiplex signals to the ATM network (ATMN) or, respectively, to receive this information from the ATM network (ATMN), evaluate it, and pass it to the ATM converter (ATMC) and to the channel  
5 multiplexer/demultiplexer (C-M/DM).

add  $C^3$   
add  
D2